

19990617.ba v02_n583.bam.990617 v02_n584.bam.990617

>From ???@??? Fri Jun 18 07:31:15 1999
Message-Id: <199906171137.d5HBbN029131@sco.theporch.com>
Date: Thu, 17 Jun 1999 06:36:49 CDT
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 2583

BOATANCHORS Digest 2583

Topics covered in this issue include:

- 1) RE: SX-73 Ballast Tube
by Paul Bernhardt <bern@ppdu.nrl.navy.mil>
- 2) Re Amperite ballasts
by philip mccooy <dgnova@erols.com>
- 3) Re: LONGEVITY-MAGS, SIDE NOTE
by Norm Flasch <flasch@cushy.ece.nwu.edu>
- 4) Turner mic parts
by James.Reid@merisel.com
- 5) military Manual sources
by "Mike Warren" <w5maz@earthlink.net>
- 6) Re: Amps for Computers
by Morris Odell <morriso@vifp.monash.edu.au>
- 7) RE: SX-73 Ballast Tube
by "ROBERT W. DOWNS" <RWDowns_WA5CAB@compuserve.com>
- 8) Why 5V?
by john <johnmb@mindspring.com>
- 9) Re: Simpson 260's and VOM reliability
by Bob Roehrig <broehrig@admin.aurora.edu>
- 10) ? modulation reactor question ?
by Phil Mills <plmills@ibm.net>
- 11) Re: Amps for Computers
by Scott Robinson <spr@earthlink.net>
- 12) Put the screws to your rack
by "Robert Nickels" <ranickel@mwci.net>
- 13) Fw: Simpson 260's and VOM reliability
by "Wayne & Deb Harrah" <harrah@ia.net>
- 14) Z-Bridges, Heath (long)
by mnhopkins@juno.com
- 15) re: oscillographs
by Bill Hawkins <bill@iaxs.net>
- 16) My favorite VOM
by Scott Robinson <spr@earthlink.net>
- 17) Oscillographs
by Scott Robinson <spr@earthlink.net>
- 18) help suspending the list

by David and Shari Abell <dabell@aloha.net>
19) Help a non-list member with a Racal RA6790M?
by Tom Norris <badger@telalink.net>
20) Why 5volts?
by "Don L. Davis" <dxguy@earthlink.net>
21) Mil VOM's (was: Simpson 260's and VOM reliability)
by "Mike Warren" <w5maz@earthlink.net>

Date: Wed, 16 Jun 1999 10:27:08 -0400 (EDT)
From: Paul Bernhardt <bern@ppdu.nrl.navy.mil>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: Old Tube Radios <boatanchors@theporch.com>,
DC BoatAnchorites <dcboatanchors@qth.net>
Subject: RE: SX-73 Ballast Tube
Message-Id: <Pine.A32.4.03.9906161013190.34016-100000@ppdu.nrl.navy.mil>
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Dennis and All-Who-Responded,

Thanks for the information for the required 6-4 ballast tube for the SX-73. I found one in my stock of tubes here. The 6-4 provides 600 mA regulation from 4 to 8 Volts. Testing a number of tubes that I have found that the first number for the Amperite Automatic Regulator tubes is the regulation current in 100 mA units. The second number is the minimum voltage for operation of the ballast resistor.
Sincerely, Paul Bernhardt

Work: P.A. Bernhardt	Home: Paul Bernhardt, KF4FOR
Code 6794	5704 Ridge View Dr.
Naval Research Laboratory	Alexandria, VA 22310
Washington, DC 20375	
Tel: 202-767-0196	703-960-9656
FAX: 202-767-0631	

On Tue, 15 Jun 1999, Gibbs, Dennis wrote:

> The Ballast tube is 6-4. Yes, I believe Amperite still sells these,
> although they are pretty expensive. The last I heard (This was several
> years ago) they were charging \$25.00 each for them.
>
> Dennis
>
> -----Original Message-----
> From: Paul Bernhardt [mailto:bern@ppdu.nrl.navy.mil]
>
> My newly acquired SX-73 does not have a ballast tube. This tube fits into
> the octal socket labeled R80. Can someone give me

> the number for this tube? Did Amperite make a replacement?
> Thanks, Paul Bernhardt
>
>

Message-ID: <3767E44B.7E3@erols.com>
Date: Wed, 16 Jun 1999 10:52:11 -0700
From: philip mccooy <dgnova@erols.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re Amperite ballasts
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Someone will have to correct me on this, but I believe amperite used the following code on their ballast tubes:

6-4

The first number, 6, represents the currant, and should be read as .6 Here it is .6 amps

The last number, 4, represents the lowest voltage where regulation commences. I think regulation goes as a 2 and 1 half range so this tube will start regulating at 4 volts and continue up to 10 volts.

If there is a letter between the numbers, say H, as in 6H4 then the scheme is modified somewhat. I think H stands for higher currant than the posted number, in this case higher than .6 amps

As I said above, someone will have to correct me on this.

From: Norm Flasch <flasch@cushy.ece.nwu.edu>
Message-Id: <199906161601.LAA19528@cushy.ece.nwu.edu>
Subject: Re: LONGEVITY-MAGS, SIDE NOTE
To: Old Tube Radios <boatanchors@theporch.com>
Date: Wed, 16 Jun 1999 11:01:57 -0500 (CDT)
Cc: boatanchors@sco.theporch.com (ba)
MIME-Version: 1.0
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: 7bit

> To: boatanchors@theporch.com
>
>
> It feels very strange (like time travel) to listen to each of them "sign

> on" into the recorder at the club meets. They spoke their calls, first
> name, home QTH & often threw in some jokes or anecdotes. They even sang
> songs at their meetings, not something I've ever heard of.
>
> -John Sehring (Sun, Jun 13, 1999 Custer SD USA) UCC WB0EQ
> (temporarily at Midwestern Regional Medical Center, Zion IL)
>

Perhaps this is one of the more valuable finds you could make. A
real trip back in time where you can get a feel for what life was
like back then.

I had a recent conversation with my mother about the times we are
living in now and her experience growing up as a farm girl in
Wisconsin. I have many fond memories of that farm. One of the
highlights was the Coronado console (with tuning eye) in the living
room. It was originally a battery set, but then converted to AC.
She said they received Chicago stations all day long in the 30's and
40's. The farm is about 350 miles from Chicago. The house had an
antenna on the roof along with several lightning rods. The barn had
lightning rods too. This was common practice in those days. The
colorful insulators are now collector items.

She said it was common for people to sing in those days (at least
in the rural areas). There was a lot of good music on the radio and
it was usual to hear people on neighboring farms singing in their
fields. This is part of the American culture that has long since
faded. I suppose that is one reason I enjoy old radios. To try
to get a feel for those times again. Thanks for the reminder.

--

Norm Flasch Electronic Specialist ECE dept
Northwestern University Evanston, Illinois
flasch@ece.nwu.edu 847-467-4387

From: James.Reid@merisel.com
Mime-Version: 1.0
Date: Tue, 15 Jun 1999 18:11:14 -0700
Message-ID: <0020A36F.C22034@merisel.com>
Subject: Turner mic parts
To: Old Tube Radios <boatanchors@theporch.com>
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Content-Description: cc:Mail note part

Greetings,

A co-worker of mine is trying to do a restoration on his father's Turner mic. It's a model 33X. Neat looking part. Currently someone has put an electret element in it and an XLR connector. Ack! Not suprisingly, none of it works. He'd like to put it back to original. Anyone have a crystal element for it or know where to find one? Any advice greatly appreciated.

-Jim

James.Reid@merisel.com

Message-ID: <001601beb83f\$7a7e4aa0\$910b010a@mike-warren.fs.com>

From: "Mike Warren" <w5maz@earthlink.net>

To: Old Tube Radios <boatanchors@theporch.com>

Cc: "Old Tube Radios" <boatanchors@theporch.com>

Subject: military Manual sources

Date: Wed, 16 Jun 1999 16:30:37 -0500

MIME-Version: 1.0

Content-Type: text/plain;
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Bob,

Here are some sources for military manuals for your USM-116, et.al.

Fair Radio - www.fairradio.com

Ford Surplus - <http://www.falls.igs.net/~testequipment/>

Surplus Al - <http://www.qsl.net/w3ugd/>

Lee Frank - <http://surplustuff.com/>

Manual Merchant 619/642-0785

Uncle Sam - www.ntis.gov

Mil-Comm Exchange (but don't know how to contact)

Good Luck,

Mike W5MAZ

Message-ID: <37681DD6.23AD6DAB@vifp.monash.edu.au>

Date: Thu, 17 Jun 1999 07:57:42 +1000

From: Morris Odell <morriso@vifp.monash.edu.au>

MIME-Version: 1.0

To: Old Tube Radios <boatanchors@theporch.com>

Subject: Re: Amps for Computers

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Anchorites,

Jderm740@aol.com wrote:

> Hello, Hello, HELLO
> Can you hear me?
> With 15watts per channel you should be able to hear me next door.

How true. It always amazes me to experience just how little power is really needed with decent speakers. I spent a few days recently cleaning & aligning my shack's FM entertainment radio. It's an Eddystone 770R which manages a puny 3 watts or so from push pull 6AM5's. I run it into a large 3 way "HiFi" type speaker which was left behind by the previous owners of my last house. The volume is literally earsplitting at about 50% gain setting.

73

Morris

I wouldn't
> want any more unless the speakers were so inefficient that they sucked all
> the power the amps could deliver. Back in the 50s we were building a speaker
> cabinet called a Karlson. It used a 15" coaxial and was so efficient that my
> little Heath 7 watt amp could only be run at about half power or it would
> drive you out of the house.
> Wht are you going to get from the pooter that requires all that sound and
> power. I have a sound card in mine and it only plays on bootup and mistakes.
> Never hear anything otherwise.
>
> Jack

Date: Wed, 16 Jun 1999 18:43:37 -0400
From: "ROBERT W. DOWNS" <RWDowns_WA5CAB@compuserve.com>
Subject: RE: SX-73 Ballast Tube
To: Old Tube Radios <boatanchors@theporch.com>
Message-ID: <199906161843_MC2-79AE-1104@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable

Content-Type: text/plain;
charset=ISO-8859-1
Content-Disposition: inline

Group,

I don't recall who posted the original question, but my database says tha=
t

I have one NOS Amperite 6-4 in the garage attic. Since it doesn't appear=

to be used in any of my "Green" stuff, I'll let it go to a good home for
\$5.00 plus PriMail (\$3.20), mostly for the discomfort of going into the
garage attic this time of the year (yes, Virginia, Houston is hot in June=
).

73,
Robert Downs
WA5CAB
Houston

Message-Id: <3.0.3.32.19990616204451.00af125c@mindspring.com>
Date: Wed, 16 Jun 1999 20:44:51 -0400
To: Old Tube Radios <boatanchors@theporch.com>
From: john <johnmb@mindspring.com>
Subject: Why 5V?
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

There's usually a good reason for everything.

Why is a rectifier tube's "filament" 5v, thus requiring a separate
transformer secondary winding ?

I feel like I should KNOW this, but....

Thanks
/John

Date: Wed, 16 Jun 1999 20:41:41 -0500 (CDT)
From: Bob Roehrig <broehrig@admin.aurora.edu>
To: Old Tube Radios <boatanchors@theporch.com>
cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Simpson 260's and VOM reliability
Message-ID: <Pine.OSF.3.96.990616201955.9352B-100000@admin.aurora.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I have never liked the 260's, and I have had several. I still have one at work (it was there before me) and it has one of the typical problems: poor battery contact causing the resistance readings to go all over the place.

Most other problems I have encountered were related to poor AC voltage calibration.

I have gone thru a lot of cheap multimeters with brand names such as Monarch, etc and found most of those to be quite good as long as you didn't drop them. Their cases are even more fragile than a 260.

I pretty well had given up using anything but either a VTVM or DVM until I obtained a ME-70C/PSM-6B VOM from someone on this list. Now here is a METER! It is in a metal case and the accuracy is as good as any analog meter I have seen. Most all the resistors are precision wirewound and not likely to change value. The only hitch is the oddball battery scheme (which is easy to get around so standard batteries can be used).

But last week I thought my trusty meter had gone bad. My mom blew a fuse in her house and replaced it but still no power, so she called me for help. Well, I took along the aforementioned meter and found that the fuse she put in was also bad. Checking the voltage, I read 95 volts. Now, this old house has 30 amp 120V service where the line goes thru the main switch and fuses, then the meter, then the branch fuses. (Originally both sides of the line were fused and switched until I fixed that a few years ago). So the system is past due for replacement. So since she had already called the power company, I told her to tell them power was back on but the voltage was low. About 15 minutes after I left the power guy shows up and reads 119V. So now I am trying to figure out what has gone wrong with my meter. Well, two things - one was that there is a slider resistor on the board behind the meter. the mounting screws had worked loose so intermittent connections. But the kicker was that in my haste I had been reading the AC voltage on the DC scale! Nothing wrong with the calibration at all. Guess I just haven't used it to read AC that much.

I agree with Arden that a VTVM is hard to beat and practically impossible to overload but there are many cases where AC power is not handy where you need to use it. If you are looking for a good VOM, I would look for a good military surplus job first.

"Nostalgia is a thing of the past"

E-mail: broehrig@admin.aurora.edu or k9eui@arrl.net 73 de Bob, K9EUI
CIS: Data / Telecom Aurora University, Aurora, IL
630-844-4898 Fax 630-844-4222

Message-ID: <37685499.FAF91C1E@ibm.net>
Date: Wed, 16 Jun 1999 20:51:21 -0500
From: Phil Mills <plmills@ibm.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: ? modulation reactor question ?
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I'm in the process of parting out a homebrew amplifier. The power supply was allegedly built with parts from a broadcast transmitter....the plate transformer certainly looks the part :-). Anyway, the filter choke in this power supply is marked as a "modulation reactor". My question is....what is the difference?

thanks & 7 3,
Phil
AB5TH

Message-ID: <37685411.3DF8E66C@earthlink.net>
Date: Wed, 16 Jun 1999 18:49:05 -0700
From: Scott Robinson <spr@earthlink.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Amps for Computers
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Morris Odell wrote:

>

> How true. It always amazes me to experience just how little power is
> really needed with decent speakers.

and Scott says:

A friend of mine started his career in cinema servicing by sweeping the floor. The then common speakers in American cinemas were Altec-Lansing A- series, usually A-4. These speakers deliver 108 dB sound pressure level from 1 watt input at a distance of 1 meter. Most quality home stereo speakers do about

88 dB on 1 watt, which is to say they need 100 times as much power for the same loudness.

Now, Altec A-4s don't sound very good IMHO, but here's what 108 dB1W/1m means: My friend used to hook his 300 mW pocket transistor radio up to the A-4 and get a comfortable listening level in the entire cinema while he cleaned the place!

To make a long story about speaker design short, there is a trade-off between bass response, size, and efficiency. A-4s are about 10 feet tall, four feet deep, and four feet wide...

Yours for sound that will fit into your living room,

--

Scott Robinson
spr@earthlink.net

Junque is GOOD for you!

Message-ID: <019a01beb863\$e0953320\$692fcfd1@default>
From: "Robert Nickels" <ranickel@mwci.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Put the screws to your rack
Date: Wed, 16 Jun 1999 20:47:15 -0500
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

The 19" rack is one standard from the boatanchor era that shows no sign of disappearing. (Unlike the friendly local hardware store, the last of which vanished over a year ago from my little city of 25,000...another casualty of the folks from Bentonville, AR...)

But thanks to "pro audio", the business of making racks and accessories seems to be flourishing. One source is Parts Express:
www.partsexpress.com

They sell a bag of 100 10-32 rack screws for \$13.80. They are heat-treated with black-oxide finish and come with washers. They also sell various rack accessories, including panels, full and half-rack shelves, and even the rail in case you want to make your own. And a huge assortment of speakers (perfect to make a thumper-box for your 390A!)

73, Bob W9RAN

Message-ID: <017901beb86d\$7236e9a0\$b5d0a0cd@default>

From: "Wayne & Deb Harrah" <harrah@ia.net>

To: Old Tube Radios <boatanchors@theporch.com>

Subject: Fw: Simpson 260's and VOM reliability

Date: Wed, 16 Jun 1999 21:59:39 -0500

MIME-Version: 1.0

Content-Type: text/plain;
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

> Bob,

>

> The PSM-6B is what I learned basic Electronics with when I went thru
Weapons

> Technical School in the USAF in 1981! I would LOVE to find one to have
> myself. If you (or anyone) ever stumble across another, let me know!

>

> Regards,

>

> Buzz (Wayne) Harrah, ke0ms

> <http://www.ia.net/~harrah>

> <mailto:harrah@ia.net> (home)

> <mailto:Wayne.Harrah@mci.com> (work)

>

> > I pretty well had given up using anything but either a VTVM or DVM

> > until I obtained a ME-70C/PSM-6B VOM from someone on this list.

> > Now here is a METER! It is in a metal case and the accuracy is as

> > good as any analog meter I have seen. Most all the resistors are

> > precision wirewound and not likely to change value. The only hitch

> > is the oddball battery scheme (which is easy to get around so standard

> > batteries can be used).

>

>

To: Old Tube Radios <boatanchors@theporch.com>

Date: Wed, 16 Jun 1999 22:28:17 -0500

Subject: Z-Bridges, Heath (long)

Message-ID: <19990616.222847.-92197.2.MNHopkins@juno.com>

MIME-Version: 1.0

Content-Type: text/plain

Content-Transfer-Encoding: 7bit

From: mnhopkins@juno.com

The difference between a kit builder and a home brewer often hinges on one machine: An Impedance Bridge. Heath knew from the first that a small market existed for these impressive looking devices and the line

stretches back to the earliest 1950s.

The first I found, sitting on the pavement at a broadcast radio collector's rummage sale, was a Heath Model IB-1B, from about 1952. This one sits in a wood case with a slight taper down. The color is beige like an AT-1 transmitter, but the lettering is red. A small center meter, seven small knobs, and one large one are features of the panel with screw terminals for unknowns and for external AC detector.

The IB-1B has no vacuum tubes at all, just a mechanical device to generate a 1000 hz tone from a lantern cell. It reads 0.01 Ohms to 10M; 10 pF to 100 uF and 10 uH to 100H.

The Model IB-2A of 1958 assumes the familiar upright posture with a top taper back from midline. The picture on the manual I have looks like it is gray, and it has two big knobs, two medium sized, and a bunch of small. Inside one finds battery tubes, 1U4 (2) and 1L4 (2) forming a generator and a detector. The center meter has grown but it only goes down to 100 pf.

By 1977 the Model IB-3128 has changed little from the '58 IB-2A, but by then Heath is offering an allied product. The QM-1 Q Meter of 1966 looks like an impedance bridge but has 180 degree scales on each side that swing down and four binding posts on the top right. There is a big meter in the center for readings directly in Q plus 1 uH to 10uH and 40pf to 400 pf. There is also a built in RF generator tuning from 150 kc to 18 mc and tubes inside are 6AL5, 12AU7, 12AT7, 0D3 and 6X5.

Ham literature bristles with useful articles, but of special interest to the Heath student is "All About Impedance Bridges," Burgess, H, (W5WGF) CQ Magazine, Sep., 1945 p 43. In this last of a series of on test equipment, the author uses and illustrates a Heath IB-2.

de ab5L, michael in dallas, MNHopkins@JUNO.com
Student of Tecraft, ICM and Six Meters' Golden age: 1957-58
Box 226841, Dallas, TX 75222
Banned for life from QRP-L mailer for various truths.

Date: Wed, 16 Jun 1999 23:22:35 -0500 (CDT)
From: Bill Hawkins <bill@iaxs.net>
Message-Id: <199906170422.XAA09333@citrus.iaxs.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: re: oscillographs

Well, I resisted until the Honeywell machine was mentioned. The one I used in 1969 to troubleshoot a plant problem for Hercules, Inc. was a Visigraph or something like that. No crt in it, just banks of mirror

galvanometers lit by a mercury vapor light so the beam from the mirror fell on special paper from a roll. It could go pretty fast, perhaps 10 inches per second. Compact box about the size of an HP 606 signal generator.

We used it to find a surge problem in a 30,000 SCFM centrifugal air compressor. We hooked the 10-50 milliamp signals from sensors and actuators around the compressor to galvos in the Visigraph, then fed steam to the turbine and started the chart paper at 10 inches per minute. The compressor went BANG and we shut everything down. Then we looked around for a source of low level UV to develop the paper - all the lights were incandescent in the control room to keep noise down. Finally went back to the motel restaurant and unrolled the paper under the fluorescent lights in their kitchen, to their amusement. If you're still with me, it turned out that the flow from the vent didn't match the position of the anti-surge valve. That was caused by the vent silencer (took a crane to get it down) being plugged by the sleeve from an expansion joint that had vibrated loose.

Funny how young people are impressed by big machines that make loud noises. This thing was about the size of a railroad engine. The plant used the air to burn ammonia on a half million dollars worth of platinum gauze catalyst to make red fuming nitric acid. Great stuff.

Regards,
Bill Hawkins

Message-Id: <v03007803b38e31237877@[209.179.146.85]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Date: Wed, 16 Jun 1999 22:04:31 -0700
To: Old Tube Radios <boatanchors@theporch.com>
From: Scott Robinson <spr@earthlink.net>
Subject: My favorite VOM

Folks,

The first thing I bought when I started fixing motorcycle electrics back in the British days, when there was a LOT of fixing to do, was a VOM.

I looked in catalogs and picked out a Lafayette model. It was about 2.3 the size of a Simpson or Triplet and had more sensibly chosen ranges. In particular, it had a 25 volt DC range, essential for working on 12 v electrical systems.

It is not now (33 years later) in great shape, having been dropped multiple times. However, everytime I checked its accuracy, it was spot on. The

famous brands couldn't do better, and Simpsons in particular had what I think of as a useless set of ranges.

I now own a Triplet 630, but have modified it so that the 60V dc range is 30V. The quality of the Lafayette meter continues to impress me....and yes, it did cost half the price of brands S or T-about \$30 in 1966.

Regards,

Scott Robinson
spr@earthlink.net

Junque is GOOD for you!

Message-Id: <v03007804b38e32fae731@[209.179.146.85]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Date: Wed, 16 Jun 1999 22:14:29 -0700
To: Old Tube Radios <boatanchors@theporch.com>
From: Scott Robinson <spr@earthlink.net>
Subject: Oscillographs

Folks,

In the early 80s, I worked instrumenting nuclear power plants for their startup testing. Let me assure you that a great deal of careful testing was in fact done before the plants were licensed to operate.

We used UV sensitive paper and recorders with both mirror galvos and funny shaped CRTs to write on the paper. The most nerve-wracking test was one for which we scrambled (abruptly shut down) the reactor. We had three recorders and a total of about 50 channels of data. The paper was run VERY fast; you got about 2 minutes to a roll. The dodgy bit was that the shut-down process had a variable delay, and it sure was worrisome watching the paper run until you heard the big BANG! of immense valves closing.

The thing about this test is that it takes about 24 hours to bring the plant back on line, and that's \$200,000 of revenue lost. The utility company most emphatically did not wish to do the test twice...

BA content: one of the recorders had a CRT in it, and that's a tube, innit, mate?

Regards,

Scott Robinson
spr@earthlink.net

Junque is GOOD for you!

Message-Id: <Version.32.19990616200154.00f48ab0@mail.aloha.net>
Date: Wed, 16 Jun 1999 20:03:15 -1000
To: Old Tube Radios <boatanchors@theporch.com>
From: David and Shari Abell <dabell@aloha.net>
Subject: help suspending the list
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi all,

I am going on vacation and want to suspend my list mail. Can anyone tell me how?

Thanks and aloha,

Dave, WH6OL

Message-Id: <3.0.5.32.19990617044701.009eed40@mail1.telalink.net>
Date: Thu, 17 Jun 1999 04:47:01 -0500
To: Old Tube Radios <boatanchors@theporch.com>
From: Tom Norris <badger@telalink.net>
Subject: Help a non-list member with a Racal RA6790M?
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Please reply directly to Jim and not me

Tom KA4RKT

>From: Jim Pruitt wa7duy@eburg.com
>Subject: Racal RA6790M

>

> I am trying to find information to repair a Racal RA6790 receiver. I need
>at least a schematic and parts list. I have done web searches and get a
>few hits but few helpful.

> Can you help me locate this information or point me in the right
>direction? A manual would be nice but I am not sure of sources for that.
>I have tried FAIR Radio and a couple of others but was either too late or

>none existed.
> I ran across someones Military manuals page that listed a Mil manual
>number but lost the link and am not sure how to locate the manual and
>obtain it if one exists (government printing office?).
> Any help would be appreciated.
> Thank you.
>
> Jim Pruitt, WA7DUY
> Ellensburg, WA
>
>

Message-ID: <3768D326.27B4@earthlink.net>
Date: Thu, 17 Jun 1999 02:51:41 -0800
From: "Don L. Davis" <dxguy@earthlink.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Why 5volts?
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I don't know exactly why 5 volts evolved, but there is a very good reason why you run the rectifier off of a sepaate winding: the cathode is several hundred volts above ground and the filament may develop a fairly high voltage during normal operation, so they use a special, separate winding rated for high voltage itself. If the other tubes were all run off of this winding, there is a high probability of catastrophic short circuit.

Perhaps 5V was developed as a result of common 2.5 volts used for many early tubes (45, 2A3, etc, etc). Reasoning: 5v is twice 2.5, so turns ratio works out nicely for the xfmr. So.... the real question might be - why did they use 2.5 volts? Two battery cells?

73

Don Davis

Message-ID: <005c01beb8b6\$39d26140\$7bc61b26@mikewarr>
From: "Mike Warren" <w5maz@earthlink.net>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: "Old Tube Radios" <boatanchors@theporch.com>
Subject: Mil VOM's (was: Simpson 260's and VOM reliability)
Date: Thu, 17 Jun 1999 06:40:38 -0500
MIME-Version: 1.0
Content-Type: text/plain;

charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi All,

I'll second Bob on the PSM-6.

Another good mil surplus meter for BA use is the AN/USM-223 (ME-297/U). It'll do 5000V AC/DC and 10A and can be switched to 1,000 ohms-per-volt or 20,000 ohms-per-volt. Rugged case with lid and place to store test leads. Accuracy rating is 3% to 500V; 4% at 1000V and 6% at 5000V (DC). AC figures are 4,5,7 %.

One note from printed information in the cover: "NOTICE: This is a SAFE OHMMETER; does not function as a semiconductor tester (refer to T.M.).

What's a 'semiconductor'? Is that like a tube that only partially conducts?

Mike

-----Original Message-----

From: Bob Roehrig <broehrig@admin.aurora.edu>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: Old Tube Radios <boatanchors@theporch.com>
Date: Wednesday, June 16, 1999 8:45 PM
Subject: Re: Simpson 260's and VOM reliability

>I pretty well had given up using anything but either a VTVM or DVM
>until I obtained a ME-70C/PSM-6B VOM from someone on this list.
>Now here is a METER! It is in a metal case and the accuracy is as
as
>good as any analog meter I have seen. Most all the resistors are
>precision wirewound and not likely to change value. The only hitch
hitch
>is the oddball battery scheme (which is easy to get around so
standard
>batteries can be used).
>

End of BOATANCHORS Digest 2583

>From ???@??? Fri Jun 18 07:33:16 1999
Message-Id: <199906180347.d5I3l1008916@sco.theporch.com>
Date: Thu, 17 Jun 1999 22:46:33 CDT
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 2584

BOATANCHORS Digest 2584

Topics covered in this issue include:

- 1) Re: Avo/Simpson
by Andre Guibert <aguibert@sympatico.ca>
- 2) Re: Why 5volts?
by Al Klase <skywaves@bw.webex.net>
- 3) Simpson 260
by "Paul Bernhard Sr." <w2tu@email.msn.com>
- 4) Speaking of Spooky....
by Dexter Francis <cwest@xmission.com>
- 5) Re: Ballast tubes
by Dexter Francis <cwest@xmission.com>
- 6) Oscillographs
by Bruce Muscolino <w6toy@erols.com>
- 7) Verified Virus Alert
by Dave Jordan <wa3gin@erols.com>
- 8) Half-way through the "Big OldRadio Museum Tour"
by "John Dilks, K2TQN" <oldradio@worldnet.att.net>
- 9) Re: Why 5V?
by "Sandy W5TVW" <ebjr@worldnet.att.net>
- 10) Re: Why 5volts?
by John Shriver <jas@shiva.com>
- 11) The PE Sixes of W9RAN (long)
by mnhopkins@juno.com
- 12) ADMINISTRIVIA: Changing Email Addresses
by listown@jackatak.theporch.com (Mail List Owner)
- 13) Simpson 260 and Weston 779 Analyzer
by Rich Force <bhabooks@together.net>
- 14) Re: Note: Heath Z-Bridges (long)
by "Sandy W5TVW" <ebjr@worldnet.att.net>
- 15) BC779
by Dave Jordan <wa3gin@erols.com>
- 16) Re: BC779
by Charles Kadesch <chas@digizen.net>
- 17) BC-779
by Dave Jordan <wa3gin@erols.com>
- 18) Center tapped resistor value?

- by "Herbert M. Rosenthal" <herbrose@lobo.net>
- 19) Information on BC 721-B
by W4U0C@aol.com
 - 20) Jewett, TX Tailgater
by "Spencer Petri" <wa5jci@flash.net>
 - 21) RE: Oscillographs
by "ROBERT W. DOWNS" <RWDowns_WA5CAB@compuserve.com>
 - 22) Ballast (current regulator) tubes
by "ROBERT W. DOWNS" <RWDowns_WA5CAB@compuserve.com>
 - 23) Military HF Antenna Coupler, Wing Coupler
by "Barry L. Ornitz" <ornitz@tricon.net>

Date: Thu, 17 Jun 1999 08:12:07 -0400 (EDT)
Message-Id: <1.5.4.16.19990617080949.1c3fee5c@pop1.sympatico.ca>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
To: Old Tube Radios <boatanchors@theporch.com>
From: Andre Guibert <aguibert@sympatico.ca>
Subject: Re: Avo/Simpson

Bonjour to All
When plant engineer would see a tec. using an Avo, no
questions were asked, it was a sign of prestige.
Avo was used both for field use(Battlefield) and bench work.
Simpson's for delicate bench work. :)
Andre

Andre Guibert
aguibert@sympatico.ca

Message-ID: <3768E9B8.243334EB@bw.webex.net>
Date: Thu, 17 Jun 1999 08:27:36 -0400
From: Al Klase <skywaves@bw.webex.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Why 5volts?
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

"Don L. Davis" wrote:
>
> Perhaps 5V was developed as a result of common 2.5 volts used for many
> early tubes (45, 2A3, etc, etc). Reasoning: 5v is twice 2.5, so turns

> ratio works out nicely for the xfmr. So.... the real question might be
> - why did they use 2.5 volts? Two battery cells?
>

I think we (this group) hacked our way through this about a year ago. The first mass produced consumer tubes, '00 and '01, had 5 volt filaments to allow reasonable service from a 6-volt wet-cell battery via a reostat. Then, early AC tubes went to multiples or sub-multiples of 5: 1.25, 2.5, 5, 7.5, 10 etc. The 2.5 and 1.25 volt units were designed that way to help control AC hum. The later development of the car radio precipitated the more familiar 6.3 volt standard which is more appropriate for a 3-cell battery being float-charged by the vehicles generator (actually more like 7 volts).

73,
Al

--
Al Klase - N3FRQ
skywaves@bw.webex.net
Flemington, NJ 08822
Web Page: <http://www.webex.net/~skywaves/home.htm>

Message-ID: <004a01beb8bd\$89ae8c00\$8b5b2299@default>
From: "Paul Bernhard Sr." <w2tu@email.msn.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Simpson 260
Date: Thu, 17 Jun 1999 08:32:59 -0400

Just had to add my two cents. Here in Buffalo, as a construction electrician, almost all the guys used the "wiggers" (the little hand held voltage tester) for the measurements we needed. Accuracy was not critical and "ball-park" measurements usually sufficed. It was also one you could throw in the bottom of your gang box and it survived! When anything more critical was needed, all the contractors had the 260. It was very durable under our field conditions. Of course with the advent of hand held digital meters that has changed. My apprentices all have either the "Fluke" line or comparable when they turn over. (Now they can tell the difference between 208 and 230!)

Paul B. W2TU

Message-Id: <103130307b38ead73a55c@[166.70.6.252]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Date: Thu, 17 Jun 1999 06:57:07 -0700
To: Old Tube Radios <boatanchors@theporch.com>
From: Dexter Francis <cwest@xmission.com>
Subject: Speaking of Spooky....

I neglected to mention in my previous "Travels Abroad" that I also picked up a copy of a book entitled "The Ghost of 29 Megacycles" by John G. Fuller. (Fuller also wrote "The Ghost of Flight 401) Whether or not you believe in such things, it was interesting to note that in one experiment he described, the radio of choice was a Hammarlund Super Pro 600.(!)

The general technique seemed to involve tuning to noise around 29 mHz and hetrodyning the audio output with up to 13 low frequency audio tones between 131 and 701 hertz. Odd stuff and wild if true.

-df

Thank you for contacting us!
Visit our Web Site at:
<http://www.xmission.com/~cwest/>
CWest - P.O. Box 22443 SLC, UT 84122

Message-Id: <103130308b38eaf5115b3@[166.70.6.252]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Date: Thu, 17 Jun 1999 06:58:24 -0700
To: Old Tube Radios <boatanchors@theporch.com>
From: Dexter Francis <cwest@xmission.com>
Subject: Re: Ballast tubes

I have posted data from Amperite's reference book on my web page and have some ballasts in stock.

-df

Thank you for contacting us!
Visit our Web Site at:
<http://www.xmission.com/~cwest/>
CWest - P.O. Box 22443 SLC, UT 84122

Message-ID: <3768F645.7DFF@erols.com>
Date: Thu, 17 Jun 1999 09:21:09 -0400
From: Bruce Muscolino <w6toy@erols.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>

Subject: Oscillographs
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

All this discussion of Oscillographs brings to mind the first piece of military electronics I worked on, the "exercise section" of the Torpedo Mk 37 Mod 1. An "exercise section" is used when you want to launch a torpedo and not leave a hole in the side of whatever it hits!

The Mk 37 Mod 1 had an Oscillograph in the "exercise section". It was an 8 channel device (memory gets a little foggy here) and used pencil thin galvanometers to record various torpedo performance parameters on a moving strip of sensitized film or paper. Quite an elegant device for a box that was about 5 " square!

73

Message-ID: <3768F7E3.34190347@erols.com>
Date: Thu, 17 Jun 1999 09:28:03 -0400
From: Dave Jordan <wa3gin@erols.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Verified Virus Alert
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Folks,

I used to be in the Internet Security business for MCIWCOM and this virus is a real nasty one...particularly for those of us that store our messages in .doc format. Taking the following precautions will provide the best protection from this one:

"If you get a file called "zipped_files.exe" from anyone DO NOT RUN IT -- it will delete all your .doc, .xls, .ppt files, and then later it will delete other stuff. The thing propagates through Outlook, Outlook Express and Exchange by responding to messages in the inbox. So if you send a message to someone and they respond with a copy of this file, their system is probably infected."

73s
Dave
WA3GIN

p.s. When in doubt -- hit the delete key!

Message-ID: <3768F9F7.394F@worldnet.att.net>
Date: Thu, 17 Jun 1999 09:36:55 -0400
From: "John Dilks, K2TQN" <oldradio@worldnet.att.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Half-way through the "Big OldRadio Museum Tour"
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hello Glowing Tube Illuminaries,

Well yesterday was an interesting \$350. -- 6-hour -- lesson in the fun of owning an old vehicle.

On the way to the ARRL Headquarters, from my daughter's home in Massachusetts, I stopped for gas about 1 mile from my Newington destination. It was running great! After paying for the gas, and on my way back to the RV, I noticed a large puddle of green fluid coming from the motor area. A quick check of the heat indicator [still OK] -- I continued on.

I set up in the shadow of the ARRL W1AW station, and found the supply of green liquid was abundant and still flowing. Using a large plastic bottle, I captured most of it (1/4 gal.) It seems that without the motor running, the green liquid stopped. A quick look underneath confirmed my suspicions: water pump!

The operator at the ARRL station was very helpful in finding me a local gas station owner who said he would change the water pump late in the day. This was good; I had about two hours to show the museum.

Attaching my flatwire antenna to the poles on the museum, I attracted the attention of an ARRL employee crossing the parking lot. He was impressed with the display and said he would announce that I was there. After a few minutes several ARRL editors, department heads and other ham-employees visited me. There were also several ham visitors to ARRL who came out to see the museum as well. About 50 visited the museum altogether. I took some great photos and will post them later.

After he took several photos, QST Editor Rick Lindquist, N1RL, interviewed me. He was interested in the museum and why I built it. After that I packed up and took off for the gas station, about 2 miles away.

I made it there without overheating the engine. The station owner

wasn't happy to see the big 1973 RV (it ruined his day.) But to his credit he honored his promise and did a fantastic job replacing the water pump. Once he started, it took him about 4 hours (the removal of the radiator was a chore.) After paying, I was on the way home about 7 p.m.

The trip home was uneventful except there was some construction on the GS Parkway. So I arrived home tired and broke at 11:30 p.m.

All in all I was lucky. I was lucky I stopped at the ARRL. Had I just headed home, I most likely would have noticed the problem long after the engine overheated - and then I would have been broken-down on the interstate. That would have been much more stressful.

I never thought collecting Ham Radios would be so much fun!

Now weather may hold me up a day from going to the MAARC meet near Washington, DC - Baltimore. I may just go down early Friday morning? I'm still checking on this....

--

73' John Dilks, K2TQN

Webmaster for Antique Wireless Information ** New **

<http://www.eht.com/oldradio/awa>

--and--

for the New Jersey Antique Radio Club

<http://www.eht.com/oldradio>

Please visit my OldRadio Museum

<http://www.eht.com/oldradio/museum>

-

Message-ID: <000201beb8c8\$0513b460\$38fa490c@SandyBlaize>

From: "Sandy W5TVW" <ebjr@worldnet.att.net>

To: Old Tube Radios <boatanchors@theporch.com>

Subject: Re: Why 5V?

Date: Wed, 16 Jun 1999 21:14:26 -0500

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

>There's usually a good reason for everything.

>

>Why is a rectifier tube's "filament" 5v, thus requiring a separate

>transformer secondary winding ?

>

>I feel like I should KNOW this, but....

>

>Thanks

>/John

>

>

Easy. The voltage was in use along with 2.5 volt filaments before the days of 6 volt filament/heater tubes.

Why a separate winding? Because there would be whatever the B+ is present on the rest of the filaments/heaters of the string if you didn't use a separate winding. No good for proper triode/pentode operation!

In the older triode only sets, very often there was TWO filament supplies for the radio besides the 5 v. winding. Most early sets used one filament string with RF stages and detector and the other one for the output stage which usually had a different bias supply on it.

The most popular 5 volt filament rectifier being the '80 and it's octal counterpart, the 5Y3. More modern full wave rectifiers (filament type) retained the same 5 volt supply. A lot of indirectly heated tubes went to a 6.3 volt heater instead (6X4, 6X5 etc.)

73,
Sandy W5TVW

Date: Thu, 17 Jun 1999 09:57:51 -0400
Message-Id: <199906171357.JAA23211@brill.shiva.com>
From: John Shriver <jas@shiva.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Why 5volts?

I think it's ultimately sheer chance. At the time the UX213 rectifier tube was released, there was essentially no consistency in filament

voltages. Every previous rectifier tube had used a different oddball filament voltage (4.25, 10, etc.). Certainly 6.3V wasn't important yet, since there were no car radios.

At any rate, the UX280 was released as a plug-compatible upgrade replacement for the UX213 rather promptly. It also had a 2A 5V filament, and was a runaway success due to its very generous plate current & voltage ratings. We now know this tube as the 80.

After that, almost every consumer rectifier tube used the same 5V filament voltage. There were now economies of scale due to the high volume of power transformers with 5V filament windings.

So, it's just sheer chance that they chose 5V for the UX213 and UX280.

To: Old Tube Radios <boatanchors@theporch.com>
Date: Thu, 17 Jun 1999 08:56:10 -0500
Subject: The PE Sixes of W9RAN (long)
Message-ID: <19990617.085945.-94965.1.MNHopkins@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit
From: mnhopkins@juno.com

I saw a HBR-16 at HamCom. It was huge, bigger than a Viking I, and I delighted in the pine board coil holder. But it made me reflect that there is a class of rigs that straddle, like the Colossus at Rhodes, the home brew and collector worlds. These published design rigs would certainly include all the HBRs from QST and my favored DCS-500. But they also include the projects from Popular Electronics, the same folks who gave us Carl and Jerry stories along with a cadre of ham home brew projects in exacting detail.

And that is just what Bob Nickle, W9RAN, has unearthed. The first out from some rain soaked hamfest junkbox was a "Simple Superhet for 6," Green, C. (W3IKH), Popular Electronics, Apr, 1963, p 58. This little RX trumps your Heath Sixer by being a superregenerative superhet with a 2 mc IF. That is the approximate IF of a WRL TC-6/6A "Tomcat Six," but the Globe has an RF amp. This one goes right to the 12AU7 mixer/oscillator and atones for that sin by inserting a 6AK5 supergenny detector in front of another 6AK5 audio. Those little tubes are favored as they are good up to 400 mc and only draw 175 mA.

The PE superhhet has a 6.8 meg resistor on its detector grid, some feedback caps, and a 50K control to be sure you get all the way up to the

hiss of superaudibly interrupted rush. It tunes 50 - 53 (don't even THINK where that puts the free running LO), but a later mod in the transmitter article brings it down to 50-51 mc.

It took 17 months to pen a "Companion 6-Meter Transmitter," (Sep, 1964 op sit), and it might not have been worth the wait. Its pretty regular, guys, as Carl or Jerry might say, with a pair of 6CX8s. One is the Heising modulator and the other the entire RF stage. It triples from 8 mc and doubles in the final. That is a cheap CB or Tomcat 6 setup that would be a public menace were it not true that the nearly 5W input, with a doubler, would be lucky to pump out 2W of broad spectrum mayhem. But on the upside, both articles have detailed old fashioned placement drawings as well as schematics and Bob's samples are uncommonly faithful copies of these now 30+ year old classics.

Sneak into his website and take a look:

<http://users.mwci.net/~ranickel/6mtwins.jpg>

6mtxfnt.jpg
6mrxtop.jpg
6mtxbot.jpg

6mrxbot.jpg

de ab5L, michael in dallas, MNHopkins@JUNO.com
Student of Tecraft, ICM and Six Meters' Golden age: 1957-58
Box 226841, Dallas, TX 75222
Banned for life from QRP-L mailer for various truths.

Message-Id: <199906171615.LAA21197@jackatak.theporch.com>
From: listtown@jackatak.theporch.com (Mail List Owner)
To: Old Tube Radios <boatanchors@theporch.com>
Subject: ADMINISTRIVIA: Changing Email Addresses
Date: Thu, 17 Jun 99 11:15:01 CDT

Gang-

This periodic post is intended to help subscribers whose email address has changed, preventing posting or receipt of the list.

If you change ISP (InterNet Service Provider), simply send me an email advising the change, and I will do my best to implement the change quickly.

For those unfortunates, whose ISP has made a change without advising their customers of the potential impact of that change on subscribers to email lists like the boatanchors, where one must be a subscriber to post to the list, try to follow along...

Under some circumstances, the changes to your email address are "transparent" to you, but prevent posting. I get error notification for these kinds of problems, and I try to work them out. However, I may miss one, and on this end, the process is anything BUT automatic.

You have a bigger stick than I do. You and your ISP have the primary responsibility to repair the problems caused by the change at the ISP. I have zero leverage with your ISP, and you have great leverage.

Most ISP maintain a customer service department to help with problems like these. This should be your first line of support for email problems. I am happy to assist and consult, but try to understand that when your ISP makes a change to their email handler, and that change prevents you from posting to the boatanchors list, I can help, but resolving this problem is your responsibility, working with your ISP. I am but a volunteer, contributing my time to administer the list.

Thank you for your attention.

--

73

Jack, W4KH/Mobile - - - BoatAnchor Mailing List Archiver/Owner - - -
listown@jackatak.theporch.com - "Plus ca change, plus c'est la meme chose"

"Il n'y a que les idiots qui ne changent jamais d'idee"

Thu Jun 17 11:15:01 CDT 1999

Message-Id: <4.1.19990617161819.00969100@pop.together.net>

Date: Thu, 17 Jun 1999 16:27:12 +0000

To: Old Tube Radios <boatanchors@theporch.com>

From: Rich Force <bhabooks@together.net>

Subject: Simpson 260 and Weston 779 Analyzer

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

Hello All, A friend and I are negotiating for me to purchase either one of the subject meters from him. As often happens when friends sell to friends it's hard for either of us to come to a fair value (neither one of us wanting to take advantage of the other). I honestly have no idea of the worth of either of these meters. Can anyone help us by giving us the normal flea market type sale value of these meters?

Rich WB1ASL

Message-ID: <012c01beb8e1\$56c5ab60\$dfec490c@SandyBlaize>

From: "Sandy W5TVW" <ebjr@worldnet.att.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Note: Heath Z-Bridges (long)
Date: Thu, 17 Jun 1999 11:36:51 -0500
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I don't know what I would have done without the two Heath bridges! I had the charcoal grey version of the impedance bridge (IB2A?) and same version of the "Q" meter.

The First being most useful for measuring resistors and audio inductors. The

"Q" meter I considered an "electronic" ARRL Lightning Calculator!

I no longer own them, but now have a Leeds & Northrop

Wheatstone bridge

(very accurate for very low value resistors!) and a General Radio 1650B

Impedance bridge. I found a TS-617/B "Q" meter at a hamfest. It has one

lower and one higher range than the Heath did and is even more useful.

Both are VERY useful instruments. Another device which is a "sleeper"

is the Autek RF-1 RF bridge. Also extremely accurate and useful within

it's range and very easy to use.

Always wanted a General Radio 1606B RF admittance bridge, but was always "too late" when one appeared at a hamfest!

73,

Sandy W5TVW

Message-ID: <37693FC0.7BFEB309@erols.com>
Date: Thu, 17 Jun 1999 14:34:40 -0400
From: Dave Jordan <wa3gin@erols.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BC779
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Folks,

A friend has offered to give me a BC779...what is it?

thanks,
dave
WA3GIN

Message-ID: <3769699D.4D6E@digizen.net>
Date: Thu, 17 Jun 1999 14:33:17 -0700
From: Charles Kadesch <chas@digizen.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: boatanchors@theporch.com
Subject: Re: BC779
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Dave Jordan wrote:

> A friend has offered to give me a BC779...what is it?

Dave: It's a military Super Pro. It uses a seperate power supply.
-73-
Chas W3KC

Message-ID: <376952E5.139A57B6@erols.com>
Date: Thu, 17 Jun 1999 15:56:21 -0400
From: Dave Jordan <wa3gin@erols.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BC-779
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Thanks for all the inputs....I know have a picture and good idea of the
rig...I
think I'll take it...looks like some fun AM listening coming my way.

later,
dave
WA3GIN

Message-ID: <37695459.584C@lobo.net>
Date: Thu, 17 Jun 1999 14:02:39 -0600
From: "Herbert M. Rosenthal" <herbrose@lobo.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Center tapped resistor value?
Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

A consensus, please, on the value of a resistor:

My current project is a linear with a pair of 811As. Filament voltage is nominally 6.3 volts @ 3A per tube for a total of 6A.

I have a 6.3V transformer with primary adjustment taps which allows me to set the voltage to 6.3V, measured at the tube sockets, after the bifilar filament choke and the wiring.

The transformer is NOT center tapped. I should like to place a center tapped resistor (or more likely, two resistors in series), wirewounds and bypassed for rf, of course, across the secondary of the transformer, and use the center tap as the plate and grid return.

What total value of RESISTANCE should I use? One that draws ten percent of the total current draw (0.6A), or can I effect a center tap with higher resistance and less current?

Please set me free-directly to my email address:

herbrose@lobo.net

Thanks. BTW, I spent 75 cents @ 15 cents/minute with the ARRL "Technical Questions" person; I would have done better asking the clerk at the local Burger King, and buying a cup of their coffee with the 75 cents! Or perhaps Home Depot. Gone are the days...

Herb Rosenthal W5AN

From: W4UOC@aol.com
Message-ID: <4ef0c0a1.249ad5de@aol.com>
Date: Thu, 17 Jun 1999 18:51:10 EDT
Subject: Information on BC 721-B
To: Old Tube Radios <boatanchors@theporch.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

I picked up a BC 721-B which I understand is a BC-611 set up to be used on gliders. It looks just like a BC-611 but it has a jones plug on the side of the base to connect to a headset or something like that.

I don't know much about the BC-611 etc. but would like to see if I could fire it up.

The xtals in in ar 3995 and something llike 4050. I did not write them down.

What are the power requirements? Does the receiver use the same fundamental xtal as the transmitter is is different? Does anyone have a schematic for the BC-611, etc.

Above the push to talk switch is a slide that opens to a hole about the 3/4 the size of a dime and all I see behind it are some resistors, etc. Maybe a test point.

Do you turn on the receiver by pulling up the whip?

This unit is pretty clean. I pulled the chassis out of the case and it looks very good.

I would be interested in hearing your thoughts on this unit.

Tom Koch - W4UOC
Atlanta, GA

Message-ID: <000101beb91a\$013cc280\$8b301ed1@wa5jci>
From: "Spencer Petri" <wa5jci@flash.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Jewett, TX Tailgater
Date: Thu, 17 Jun 1999 18:34:51 -0500
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Greetings,

If anyone is in range of the above, the tailgate sale is Saturday, June 19. Fellow who runs it said there would be a lot of stuff this time?? At the Community Center, right downtown Jewett early in the morning.

GL,

es 73 de Pete WA5JCI

6 meter VUCC # 361
2 meter VUCC # 346

Date: Thu, 17 Jun 1999 21:38:42 -0400
From: "ROBERT W. DOWNS" <RWDowns_WA5CAB@compuserve.com>
Subject: RE: Oscillographs

To: Old Tube Radios <boatanchors@theporch.com>
Message-ID: <199906172138_MC2-79D8-9453@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain;
charset=ISO-8859-1
Content-Disposition: inline

Group,

The pipe and pipeline inspection industry until fairly recently used oscillographs to record or display the inspection data for analysis. Early ones used large galvanometers, typically called pen motors in the industry, with ink fed through flexible capillary tubes, and driven by tube amps. There were also some built which used thermal paper, mostly Japanese as I recall. The need for faster chart speeds in the pipeline inspection and geophysical industries supported the development of the light beam types, using super pressure mercury lamps and UV sensitive paper. The last, and probably best, of them was the 18 channel Honeywell 1858, which used a CRT. The flying spot was modulated by the analog input amps to turn it on and off to draw the various channels. It could be expanded to 32 channels with an add-on chassis. The 1858/1870 combination cost around \$20,000. =

The point that I was going to make, however, was that the Bell & Howell 5-133 and 5-134 and the Honeywell 1858, and probably some others that I never bought, all had a max paper speed of 120 inches per second (12 feet per second), not 10 ips. You didn't stand in front of one of them when the paper speed was set in the upper ranges! The best paper for the Honeywell, which came in 200 foot by 10 inch rolls, cost a bit over \$100 per roll in 1990. Didn't take long to blow a c-note, especially if you hit the X10 button by mistake. :-)

73,
Robert Downs
WA5CAB

Houston

Date: Thu, 17 Jun 1999 23:42:53 -0400
From: "ROBERT W. DOWNS" <RWDowns_WA5CAB@compuserve.com>
Subject: Ballast (current regulator) tubes
To: Old Tube Radios <boatanchors@theporch.com>
Message-ID: <199906172343_MC2-79D5-D215@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain;
 charset=ISO-8859-1
Content-Disposition: inline

Group,

While looking for the Amperite 6-4, I discovered that I had about ten 5TF4's. Does anyone know what these are used in? =

73,
Robert Downs
WA5CAB
Houston

Message-Id: <199906180245.WAA32167@flash.naxs.net>
From: "Barry L. Ornitz" <ornitz@tricon.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Military HF Antenna Coupler, Wing Coupler
Date: Thu, 17 Jun 1999 23:46:11 -0400

I recently ran across an interesting automatic antenna coupler on Murphy's Surplus Warehouse (El Cajon, CA). Checking with Mike Murphy, he said it was used in aircraft and sometimes called a wing coupler, and it was for 2 to 30 MHz. He had no other information. The unit was made by Univac and it contains some interesting parts including a motor driven vacuum variable capacitor, a fan-cooled coil (!), and door-knob caps. I have seen these in several southeastern hamfests, but without the outer cover which Murphy has. Two pictures of the coupler can be found on Murphy's web page:

http://209.239.34.153/murphyjunk/VAC_CAPS_RELAYS_MIS_ITEMS

Does anyone in the group have any idea of where this coupler may have been used (what aircraft) and what its military designation might be? Any additional information on this would also be useful. Thanks,

73, Barry L. Ornitz WA4VZQ ornitz@tricon.net

End of BOATANCHORS Digest 2584
